Request to Archive
With The National Centers for Environmental Information
For Bureau of Ocean Energy Management Video
Provided by BOEM

2017-03-22

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Jonathan Blythe

Bureau of Ocean Energy Management

Scientific Data Manager

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2. Name the organization or group responsible for creating the dataset.

DOI/BOEM

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

This dataset consists of videographic documentation of hydrocarbon seep communities located in the Gulf of Mexico, acquired over 15 dive seasons from 1988 to 2002. A total of 3,533 clips of 5 minutes duration encoded as MPEG-2 and MP4 video comprise the dataset, representing a total of 280 hours of bottom time.

During the dives, several different analog video recording formats and resolutions were used, including U-Matic, VHS, and Hi8. The present project was designed to convert these various analog datasets to a common digital format for archiving and make the data more accessible to users. This archive represents 144 submersible dives from 48 different lease block areas. The original analog video data were held at Louisiana State University by researchers who had participated in the study. The original source video were first transferred to AVI format digital video files. These files were then transcoded to mpeg-2 encoded .mpg files, which now form the bulk of the video collection, since only 16 of the AVI files have been made available. A small number of files (12) are in VOB format, which is used in DVD production. .VOB files are functionally equivalent to .MPG, and these .VOB files also use the mpeg-2 encoding format. Finally, 26 files have been encoded as H.264 video and formatted MPEG-4 Layer 14 (MP4) files. MP4 ha is an emerging standard of video accessibility on the internet, as it is universally supported by all browsers supporting the HTML5 standard.

For more detail on data variables, see the spreadsheet DiveIndex.csv

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1988-07-28 to 2002-06-04

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:
2017-02-01

7. Who are the expected users of the archived data? How will the archived data be used?
Oceanographers, marine biologists, geologists, TV producers, educators, students, the general public.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
No

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
N/A

10. List the input datasets and ancillary information used to produce the data.
Source video was captured onto analog U-Matic, VHS, and Hi8 videotape recorders from manned submersibles Alvin, Johnson Sea Link, and Pisces. These tapes were later transferred to computer digital video files in AVI format, and then transcoded into MPEG-2 format video files to reduce storage space. Most of the AVI files are no longer available, so the bulk of the collection consists of MPEG-2 files. MPEG-2 is a high quality, widely compatible video and audio format that conforms to ISO/IEC 13818 standard.

11. List web pages and other links that provide information on the data.
https://www.boem.gov/Tech-2015-004/
https://www.data.boem.gov/PI/PDFImages/ESPIS/5/5465.pdf
https://www.data.boem.gov/PI/PDFImages/ESPIS/5/5466.pdf
https://www.boem.gov/uploadedFiles/BOEM/BOEM_Newsroom/Library/Publications/2012/PowerPoint_Source_Files/3B_0830_Carney_PPT.pdf

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. MPEG-2 digital video files wrapped in MPG and VOB containers
    AVI digital video files wrapped in AVI container
    H.264 digital video files wrapped in MP4 container
    ISO 19115 compliant metadata

13. Indicate the data file format(s).
1. MPG
2. VOB
3. MPEG-2
4. MP4
5. AVI

14. Are the data files compressed?
MPEG-2

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

Files are organized by dive date

SubmersibleName_DiveDateCode_DiveNum_CLIP_ClipNum.mpg is the naming convention used for the video files.
SubmersibleName is either ALVIN, JSL, or Pisces
DiveDateCode is a unique 4 or 6 integer code associated with each dive date
DiveNUM is a 1 or 2 integer code
ClipNUM is a 2 integer code

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Entire dataset will be grouped as one collection, which can be discovered on the NCEI Ocean Archives Geoportal. That record will point to individual granule records, one per dive. Accession numbers to be assigned on this granular dive level, and so also discoverable on the NCEI AMS Granule Level Geoportal. Each granule record would like to a WAF in 0-data which would contain the video clips. Users would be able to download video from this WAF.

17. What is the total data volume to be submitted?
Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 1.023TB
Number of Data Files: 3533

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Room 4701, SSMC-3 NCEI Silver Spring
System Name: /nodc/data/BOEM-Seeps
System Owner: DOC/NOAA/NESDIS/NCEI > National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce
Additional Information: Data has been delivered to NCEI on a physical hard drive and 6 DVD-ROMs.

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. Physical Media Delivery

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Direct download links

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

The rationale for archiving the video data is that the data has been rescued from video media at Louisiana State University and converted to a contemporary digital format. These data are currently stored on desktop computer and external magnetic disks, which are subject to data loss and failure. There are users of the video data that need to

access to the video data files. The only current access mechanism is for BOEM and/or the PIs of the project to make copies of the disks for mailing. An archive solution that enables internet access to the data will serve preservation and dissemination requirements for these data.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

OER as agreed to archive the BOEM video collection at NCEI to provide proof of concept that others with video may be able to use the VDMMI project to document, preserve, and make discoverable their own video data.

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

This is considered part of the OER project and so BOEM will not be asked to contribute funds toward this archive project. BOEM Video is considered a proof of concept case study for technology transfer of the OER data management plan.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

30. Add any other pertinent information for this request.

None